



U.S. Patent Application Serial No. 09/406,798
Reply to OA dated July 14, 2006

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method for recording image, comprising the steps of:

storing image data continuously obtained by an image pickup operation in a storage medium:

measuring the amount of the image data stored in the storage medium until reaching a predetermined amount of data; and

recording each piece of the image data being stored in the storage medium into a non-volatile recording medium after the measured amount of the image data equals the predetermined amount,

wherein after starting the step of recording, the step of storing each piece of image data continuously obtained by the image pickup operation in the storage medium and the step of recording each piece of the image data being stored in the storage medium into the non-volatile recording medium are performed continuously, [[and]] in parallel and irrespective of the amount of the image data stored in the storage medium during the image pickup operation without pausing, interrupting or reducing the rate of recording the image data.



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Claim 2 (original): The method for recording image according to Claim 1, further comprising the steps of:

storing in the storage medium storage information including a start address and data length of the image data being stored in the storage medium; and

recording the image data being stored in the storage medium to the recording medium based on the storage information.

Claim 3 (original): The method for recording image according to Claim 1, wherein the step of storing image data in the storage medium includes the steps of:

converting an image signal obtained by the image pickup operation to the image data by the frame of image, and

compressing the image data before storing in the storage medium.

Claim 4 (original): The method for recording image according to Claim 3, wherein the image data are compressed according to a motion picture compression form.

Claim 5 (original): The method for recording image according to Claim 2, wherein the steps of storing image data in the storage medium includes the steps of:

converting an image signal obtained by the image pickup operation to the image data by the frame of image; and

compressing the image data before storing in the storage medium.

Claim 6 (original): The method for recording image according to Claim 5,
Wherein the image data are compressed according to a motion picture compression form.

Claim 7 (Currently Amended): An image pickup apparatus comprising:
an optical lens;
an image pickup device for taking image through the optical lens;
storage instructions device for storing image data continuously obtained by an image pickup operation of the image pickup device in a storage medium;
record instructing device for allowing a record the image data from the storage medium to a non-volatile recording medium;
measuring device for measuring of the amount of image data stored in the storage medium until reaching a predetermined amount of data; and
parallel processing instruction device, for instructing the record instructing device to record into a non-volatile recording medium each piece of the image data being stored in the storage medium during the storing operation of each piece of image data continuously obtained by the image pickup operation after the measured amount of the image data equals the predetermined amount,
wherein after starting the record instructing device, the storing each piece of image data continuously obtained by the image pickup operation in the storage medium by the storage

instructions device and the recording each piece of the image data being stored in the storage medium into the non-volatile recording medium by the record instructing device are performed continuously, [[and]] in parallel and irrespective of the amount of the image data stored in the storage medium during the image pickup operation without pausing, interrupting or reducing the rate of recording the image data.

Claim 8 (previously presented): The image pickup apparatus according to Claim 7, wherein the storage instructions device stores in the storage medium storage information including a start address and data length of the image data stored in the storage medium; and the record instructing device allows to record the image data stored in the storage medium into the recording medium based on the storage information.

Claim 9 (previously presented): The image pickup apparatus according to Claim 7, further comprising:

A/D conversion device for converting an image signal obtained by the image pickup device from analog image signals to digital image signals;

image data conversion device for converting the converted digital image signals to image data; and

compressing device for compressing the converted image data,

wherein the compressed image data are stored in the storage medium.

Claim 10 (previously presented): The image pickup apparatus according to Claim 9, wherein the compressing device compresses the image data according to a motion picture compression form.

Claim 11 (previously presented): The image pickup apparatus according to Claim 8, further comprising:

A/D conversion device for converting an image signal obtained by the image pickup device from analog image signals to digital image signals;

image data conversion device for converting the converted digital image signals to image data; and

compressing device for compressing the converted image data,

wherein the compressed image data are stored in the storage medium.

Claim 12 (previously presented): The image pickup apparatus according to Claim 11, wherein the compressing device compresses the image data according to a motion picture compression form.

Claim 13 (Currently Amended): An image pickup apparatus where image data continuously obtained by an image pickup operation are stored in a storage medium and the image data being stored in the storage medium are recorded into a non-volatile recording medium, the

image pickup apparatus comprising:

an optical lens;

an image pickup device for taking image through the optical lens;

a controller which is capable of performing the following operations;

i) storing continuously the image data in the storage medium;

ii) measuring the amount of the image data stored in the storage medium until reaching a predetermined amount of data;

iii) recording each piece of the image data being stored in the storage medium into the recording medium after the measured amount of the image data equals the predetermined amount,

wherein after starting the step of recording, the step of storing each piece of image data continuously obtained by the image pickup operation in the storage medium and the step of recording each piece of the image data being stored in the storage medium into the recording medium are performed continuously, [[and]] in parallel and irrespective of the amount of the image data stored i the storage medium during the image pickup operation without pausing, interrupting or reducing the rate of recording the image data.

Claim 14 (original): The image pickup apparatus according to Claim 13, further comprising the following operations:

iv) storing in the storage medium storage information including a start address and

data length of the image data being stored in the storage medium; and v) recording the image data being stored in the storage medium to the recording medium based on the storage information.

Claim 15 (original): The image pickup apparatus according to Claim 13, wherein the operation i) of storing image data in the storage medium includes the following operations:

i-i) converting an image signal obtained by the image pickup operation to the image data by the frame of image, and

i-ii) compressing the image data before storing in the storage medium.

Claim 16 (original): The image pickup apparatus according to Claim 15, wherein the image data are compressed according to a motion picture compression form.

Claim 17 (original): The image pickup apparatus according to Claim 14, wherein the operation i) of storing image data in the storage medium includes the following operations:

i-i) converting an image signal obtained by the image pickup operation to the image data by the frame of image, and

i-ii) compressing the image data before storing in the storage medium.

Claim 18 (original): The image pickup apparatus according to Claim 17,
wherein the image data are compressed according to a motion picture compression form.

Claim 19 (Currently Amended): A method for recording image, comprising the steps of:
storing image data continuously obtained by an image pickup operation in a storage medium;
counting the number of images of the image data stored in the storage medium until
reaching a predetermined number; and

recording each piece of the image data being stored in the storage medium into a non-volatile
recording medium after the measured number of the image data equals the predetermined number,

wherein after starting the step of recording, the step of storing each piece of image data
continuously obtained by the image pickup operation in the storage medium and the step of recording
each piece of the image data being stored in the storage medium into the non-volatile recording
medium are performed continuously, [[and]] in parallel and irrespective of the amount of the image
data stored in the storage medium during the image pickup operation without pausing, interrupting
or reducing the rate of recording the image data.

Claim 20 (previously presented): The method for recording image according to Claim 19,
further comprising the steps of:

storing in the storage medium storage information including a start address and data length
of the image data being stored in the storage medium; and

recording the image data being stored in the storage medium to the recording medium based on the storage information.

Claim 21 (previously presented): The method for recording image according to Claim 19, wherein the step of storing image data in the storage medium includes the steps of:

converting an image signal obtained by the image pickup operation to the image data by the frame of image, and

compressing the image data before storing in the storage medium.

Claim 22 (Currently Amended): An image pickup apparatus comprising:

an optical lens;

an image pickup device for taking image through the optical lens;

storage instructions device for storing image data continuously obtained by an image pickup operation of the image pickup device in a storage medium;

record instructing device for allowing a record the image data from the storage medium to a non-volatile recording medium;

measuring device for counting the number of images of image data stored in the storage medium until reaching a predetermined number; and

parallel processing instruction device, for instructing the record instructing device to record into a non-volatile recording medium each piece of the image data being stored in the

storage medium during the storing operation of each piece of image data continuously obtained by the image pickup operation after the measured number of the image data equals the predetermined number,

wherein after starting the record instructing device, the storing each piece of image data continuously obtained by the image pickup operation in the storage medium by the storage instructions device and the recording each piece of the image data being stored in the storage medium into the non-volatile recording medium by the record instructing device are performed continuously, [[and]] in parallel and irrespective of the amount of the image data stored in the storage medium during the image pickup operation without pausing, interrupting or reducing the rate of recording the image data.

Claim 23 (previously presented): The image pickup apparatus according to Claim 22, wherein the storage instructions device stores in the storage medium storage information including a start address and data length of the image data stored in the storage medium; and the record instructing device allows to record the image data stored in the storage medium into the recording medium based on the storage information.

Claim 24 (previously presented): The image pickup apparatus according to Claim 22, further comprising:

A/D conversion device for converting an image signal obtained by the image pickup device from analog image signals to digital image signals;

image data conversion device for converting the converted digital image signals to image data; and

compressing device for compressing the converted image data,

wherein the compressed image data are stored in the storage medium.

Claim 25 (Currently Amended): An image pickup apparatus where image data continuously obtained by an image pickup operation are stored in a storage medium and the image data being stored in the storage medium are recorded into a non-volatile recording medium, the image pickup apparatus comprising:

an optical lens;

an image pickup device for taking image through the optical lens;

a controller which is capable of performing the following operations;

i) storing the image data continuously in the storage medium;

ii) counting the number of images of the image data stored in the storage

medium until reaching a predetermined number;

iii) recording each piece of the image data being stored in the storage medium into the recording medium after the measured number of the image data equals the predetermined number,

wherein after starting the step of recording, the step of storing each piece of image data continuously obtained by the image pickup operation in the storage medium and the step of recording each piece of the image data being stored in the storage medium into the recording medium are performed continuously, [[and]] in parallel and irrespective of the amount of the image data stored in the storage medium during the image pickup operation without pausing, interrupting or reducing the rate of recording the image data.

Claim 26 (previously presented): The image pickup apparatus according to Claim 25, further comprising the following operations:

vi) storing in the storage medium storage information including a start address and data length of the image data being stored in the storage medium; and

vii) recording the image data being stored in the storage medium to the recording medium based on the storage information.

Claim 27 (previously presented): The image pickup apparatus according to Claim 25, wherein the operation i) of storing image data in the storage medium includes the following operations:

i-i) converting an image signal obtained by the image pickup operation to the image data by the frame of image, and

i-ii) compressing the image data before storing in the storage medium.